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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,490	04/27/2001	Akira Ichikawa	1217-010666	8227

7590 05/30/2003

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Pittsburgh, PA 15219-1818

EXAMINER

CHAN, SING P

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 05/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/830,490

Applicant(s)

ICHIKAWA ET AL.

Examiner

Sing P Chan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 3 is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Arguments

1. In response to applicant's arguments filed April 21, 2003, the final rejection of the previous office action is withdrawn. The amendment filed April 21, 2003 has been entered; a new grounds of rejection is applied.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Fujikawa et al (JP 11-161760).

The admitted prior art discloses a method of forming an IC card. The method includes mounting transmission/reception coils and other devices onto a substrate, and interposing and laminating both surfaces of the mounting substrate with laminating films using a thermal adhesive. The admitted prior art notes the problem of unevenness in such IC cards. (Specification, Pages 2-3 and Figure 6) The admitted prior art does not disclose feeding an adhesive in fluid condition on the surface of the laminating films. However, laminating films onto a mounting substrate using adhesive in fluid condition on the laminating films is well known and conventional as shown for example by Fujikawa et al. Fujikawa et al discloses a method of forming an IC card. The method includes applying covering film with a coating of adhesive to the mounting substrate and

laminating with hot rolls, which also flatten, i.e. smooth, the covering. (English machine translation, page 5, lines 21-32 and Figures 10-13)

It would have been obvious to one skilled in the art at the time the invention was made to laminate the covering films with a coating of adhesive onto the mounting substrate as disclosed by Fujikawa et al in the method of the admitted prior art to allow the covering film to be laminated onto the substrate quickly and easily while also providing a smooth surface.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over admitted prior art in view of Fujikawa et al (JP 11-161760) as applied to claim 1 above, and further in view of Toke (JP 10-302040).

The admitted prior art as modified above is silent as to gradually narrowing the distance between the covering films and mounting substrate. However, gradually narrowing the distance between the covering films and mounting substrate is well known and conventional as shown for example by Toke. Toke discloses a method for an IC card with little pressure applied to smooth and adjusting the distance between the sheathing sheets, i.e. covering film, and the mounting substrate to remove blemish. (English machine translation, Page 4, paragraph 45)

It would have been obvious to one skilled in the art at the time the invention was made to use little pressure on the hot rolls to adjust the distance between the covering films and the mounting substrate as disclosed by Toke in the method of the admitted prior art to quickly and easily laminate the films and substrate without damaging the electronic components.

Allowable Subject Matter

5. Claims 2 and 3 are allowed.

6. The following is an examiner's statement of reasons for allowance: The claims recite a method of producing IC cards. The method includes continuously feeding a mount substrate having unevenness on the surface due to the components, feeding a pair of sheet members on both surface sides of the mount substrate, which interposed the substrate between the sheet members and one of the sheet members can be a release sheet, coating the surface of the sheet members with an adhesive in fluid condition, regulating the distance between the sheet members and the substrate and hardening the adhesive. Toke (JP 10-302040) discloses a method of forming an IC card. The method includes the steps of continuous feeding the mounting sheet with the IC components, continuous feeding two sheathing sheets, applying adhesive to the sheathing sheets and laminating the sheathing sheets onto both sides of the mounting sheet and hardening the adhesive. (English machine translation, Page 4, Paragraphs 41 to 45) Toke does not disclose the surface of the substrate is uneven when the two sheathing sheets mounted or one of the sheathing sheets is a release sheet. Fujikawa et al discloses a method for producing a thin electronic circuit component. The method includes feeding the substrate film with the mounted components, feeding a cover film coated with a hot melt adhesive paste, and laminating the cover film over the substrate film with heat and pressure with hot rolls. (English machine translation, page 5, lines 21-32 and Figures 10-13) Fujikawa et al does not disclose a second cover film for the

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opposite side of the substrate or the cover film is a release sheet. A search of the prior art of record did not disclose reference or references with the recited features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

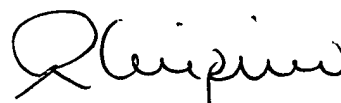
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P Chan whose telephone number is 703-305-3175. The examiner can normally be reached on Monday-Friday 7:30AM-12:00PM and 1:00PM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



spc
May 23, 2003



RICHARD CRISPINO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700